

Hallstaberget 2016

Inledning av Christoffer Jonsson, LF



Mittuniversitetet

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Lina Bellman, CER

Olov Hemmingsson, RCR

Karin Jarnkvist, FGV (sjuk)

The insurance industry and the climate change

Short- and long-term consequences of home owner's understandings of risk, willingness/ability to pay and risk behavior

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Centre for
research on
economic
relations

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FORUM FOR
GENDER STUDIES

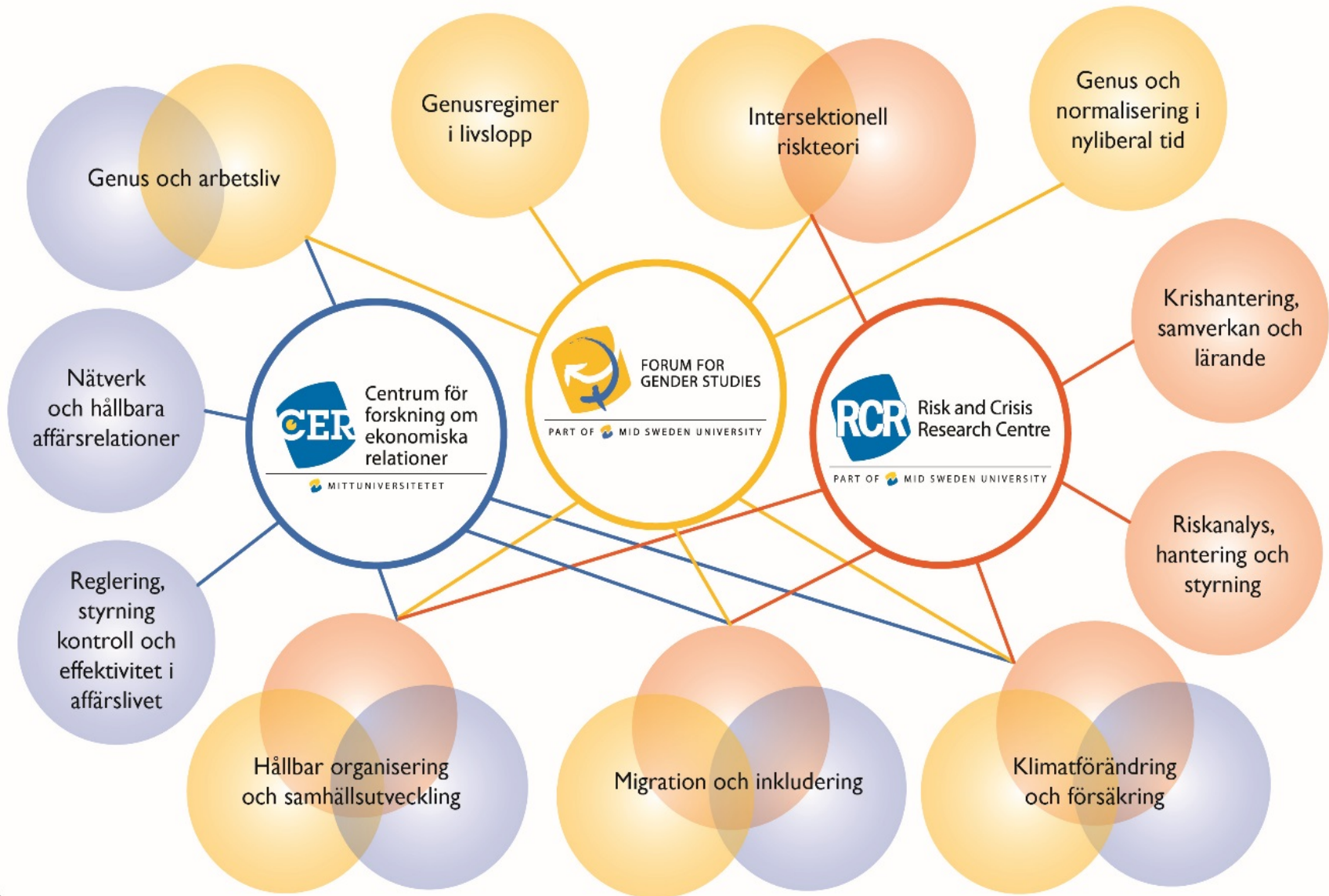
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Risk and Crisis
Research Centre

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RISK, EKONOMI OCH GENUS



Climate research group

Centre for research on economic relations (CER)

- Lina Bellman
- Peter Öhman

Forum for gender studies (FGV)

- Katarina Giritli Nygren
- Karin Jarnkvist

Risk and Crisis Research Center (RCR)

- Sara Ekholm
- Olov Hemmingsson
- Linda Kvarnlöf
- Minna Lundgren
- Anna Olofsson (Project Manager)

Student participants

- Caroline Andersson
- Sophie Kolmodin

Homeowners attitudes and behaviour in relation to climate change

The purpose of the first study is to get a deeper understanding of how homeowners' construct risk of climate change in relation their own homes related to insurance.

The national survey

- 3000 questionnaire
 - Simple random sample
 - Statistics Sweden (SCB)
 - Registry variables
- 30 % response rate (890 of 3000)
 - Weighted material by age and homeowners

Residential homeowners

- 44% of the respondents are residential homeowners
- Gender: 44 % women and 55 % male
- 93 % born in Sweden
- Age (median): 49 years old
- Annual income (median): 298 tsek

42% among homeowners believes that climate change is affecting them in the present.

Do you worry about climate change affecting...

	Not at all	To some extent	Neutral	To a large extent	To a very large extent
Your house/residence?	17,7%	27,1%	36,2%	14,6%	4,4%
You personally?	13,6%	25,5%	28,8%	25,8%	6,3%
The accommodation of the next generation?	8,4%	15,9%	22,8%	37,6%	15,3%
Next generation?	5,7%	11,2%	13,1%	42,5%	27,5%

Significant differences: gender, age

Significant differences: gender

State your attitude towards the following societal efforts for mitigation of climate change?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
State subsidies/tax reliefs	3,0%	3,0%	12,3%	29,5%	52,2%
Individual information from the state	1,6%	2,7%	18,1%	34,0%	43,6%
Individual information from municipalities	1,9%	2,8%	16,8%	37,2%	41,3%
Municipal grants	3,8%	2,7%	17,3%	34,3%	41,8%
Information from insurance companies	1,3%	3,0%	26,4%	36,4%	32,9%
Increased state tax rates	8,5%	17,0%	22,2%	28,8%	23,6%
Insurance basing cost calculation on individual climate change mitigation	5,9%	11,9%	24,3%	53,0%	19,9%
Raised municipal fees	11,3%	17,3%	23,6%	28,8%	19,0%
Insurance basing cost calculation on climate change mitigation among all customers	9,4%	28,3%	37,7%	16,2%	8,4%

To which extent do the following actors have a responsibility of informing about a climate related crisis?

	To a very small degree	To a small degree	Neutral	To a large degree	To a very large degree
Myself	8,9%	8,6%	17,5%	29,2%	35,8%
State agencies	2,5%	5,5%	13,5%	33,9%	47,2%
My municipality	1,6%	2,7%	9,2%	39,0%	47,4%
My insurance company	2,2%	1,4%	7,1%	19,3%	60,0%

Significant differences: none

Do you, present day, have insurance covering potential costs following a climate related crisis (e.g. flooding, erosion, landslide)?

No, none	Not likely	Neutral	Yes, maybe	Yes, absolutely	Do not know
12,1%	11,3%	6,5%	15,4%	5,4%	49,3%

Significant differences: gender, age

Significant differences: gender, age

Picture an insurance plan covering climate related damages.

- Would you be interested in such a plan?

No, not likely	No, probably not	Neutral	Yes, maybe	Yes, absolutely
6,5%	19,7%	23,2%	45,3%	5,4%

...even if it would cost more than other insurance plans?

No, not likely	No, probably not	Neutral	Yes, maybe	Yes, absolutely
12,4%	25,9%	24,3%	35,8%	1,6%

Damage prevention

- 70 % were in favor of buying a more resilient floor
 - 60% were in favor of moving exclusive sporting gear to a higher floor
 - 50 % were in favor of moving the fuse box to a higher floor
 - 60% were in favor of buying sandbags
- ✓ **Women were more positive than men to prevent damage**
- ✓ **No significant differences relating to income or age**

Summary of preliminary, descriptive findings

Many from the sample

- believe that climate change is already affecting their lives. However, they do not worry about it.
- do wish for public subsidies and information related climate adaption, while declining fees, taxes and collective raises of insurance costs.
- do not know whether or not their insurance plan covers climate related damages. About half of the respondents are interested in an insurance plan covering climate related change.

Upcoming data analysis

- **Tobit-regression**
 - Continuous dependent variable (willingness to pay, SEK)
 - Censored?
- **Non-parametric tests**
 - Ex. Kruskal-Wallis, Mann-Whitney U
- **Binary logistic regression**
 - Problem: dichotomisation
- **Multinomial logistic regression**
 - Problem: relevant variables are non-categorical
 - Category of reference?
- **Linear regression with bootstrapping**
 - Problem: no weights can be used

Narratives on climate risks and housing

The purpose of the second study is to get a deeper knowledge about homeowner's risk perceptions, risk behavior and willingness/possibility to pay in relation to expected climate changes.

Method

- Thematic interviews with 44 people in 35 households in their homes. 27 men and 17 women.
- 1/3 lives in new built houses.
- More or less risk-prone areas in Göteborg, Malmö, Sundsvall, Kramfors, Sollefteå och Åre.
- Sample through personal contacts and building permits by local governments



Method

Thematic interview guide

Starting with open questions about the housing and the household.
Risk and security in relation to the house and its location.
Reflections on environmental questions and climate issues.
Attitudes to insurances and willingness/ability to pay for insurances, related to climate risks.



Narrative analyzes focusing on what people talked about as well as how they talked about it. How positioned themselves in relation to the themes and how long they talked about them has been aspects that we have taken in to consideration when doing our analyzes.

Stories about risk and security

- **The survival experts** “I’ll survive, no matter what happens”
- **The highly educated** “Knowledge gives me security”
- **The affluent** “Money makes me safe”
- **The countryside lovers** “The countryside gives me security”
- **The mountain people** “Skiing is threatened”
- **The people with weak health** “I don’t have energy enough to worry”
- **The family-centred** “Family comes first”

The survival experts Men around 45-55 years. they live out of town, handy, some are in the Home Guard or have done UN service, craftsmen - to fix everything themselves.

The highly educated Those working as engineers or in academia. When they built their house, they have found out all the facts and studies available regarding building houses, climate, etc. they are risk aware.

The affluent They live close to the sea, in the newly built multi-million white houses, they hire for everything. Insurance “is not a problem” it may cost any amount.

The countryside lovers They love living where they live, do not want to live in the city, talking about belonging and closeness to nature, are not afraid of it.

The mountain people Live in Åretrakten and they have moved there because of the skiing and proximity to the mountains, are mostly afraid of the snow to disappear because of climate change, and that the price of the house, therefore, will go down.

The people with weak health Living at home due to sick leave / pension (poor health). Lives where they live in rural areas due to their partner. Their health is in focus during the interview and overshadows everything in the story.

The family-centred Talking about children’s vulnerability regarding most things, everything from cycling on roads to natural disasters and climate change.

Thanks for listening!

Olov.hemmingsson@miun.se

Lina.bellman@miun.se

Karin.jarnkvist@miun.se